

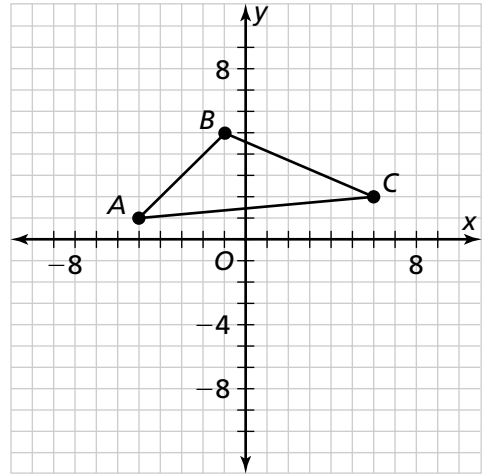
# Skill: Transforming Coordinates

## Investigation 5

### Kaleidoscopes, Hubcaps, and Mirrors

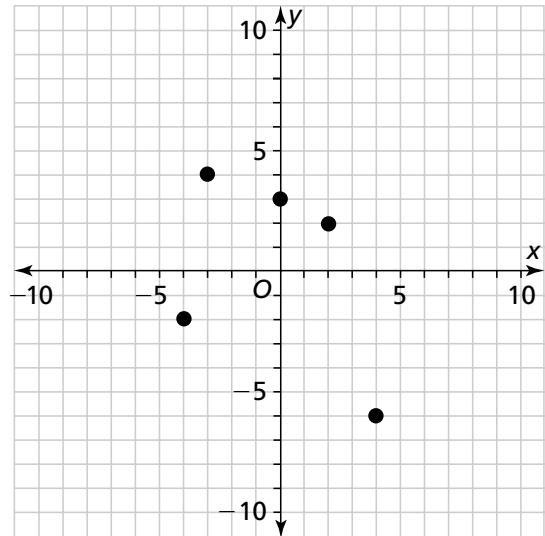
$\triangle A'B'C'$  is a reflection of  $\triangle ABC$  over the  $x$ -axis.  
 Draw  $\triangle A'B'C'$  and complete each statement.

1.  $A(-5, 1) \rightarrow A'(x, y)$
  
2.  $B(-1, 5) \rightarrow B'(x, y)$
  
3.  $C(6, 2) \rightarrow C'(x, y)$



Graph each point and its reflection across the indicated axis. Write the coordinates of the reflected point.

4.  $(-3, 4)$  across the  $y$ -axis
  
5.  $(-4, -2)$  across the  $x$ -axis
  
6.  $(2, 2)$  across the  $x$ -axis
  
7.  $(0, 3)$  across the  $x$ -axis
  
8.  $(4, -6)$  across the  $y$ -axis
  
9.  $(-4, -2)$  across the  $y$ -axis



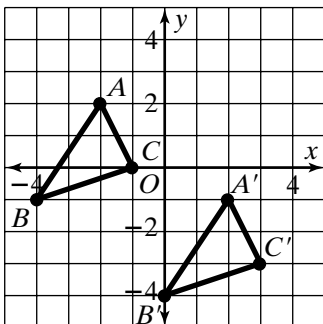
# Skill: Transforming Coordinates *(continued)*

## Investigation 5

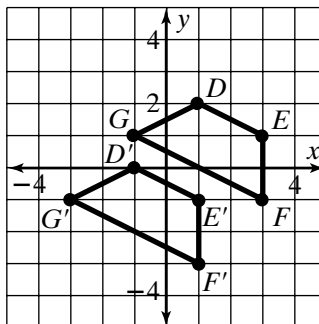
### Kaleidoscopes, Hubcaps, and Mirrors

Write a rule to describe each translation.

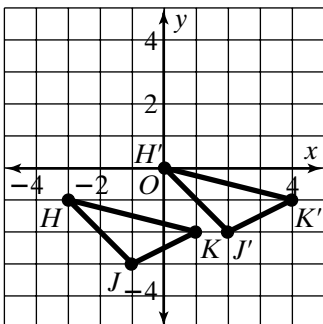
10.  $(x, y) \rightarrow$



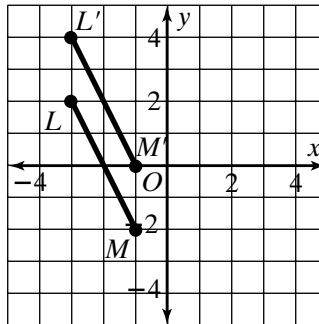
11.  $(x, y) \rightarrow$



12.  $(x, y) \rightarrow$



13.  $(x, y) \rightarrow$



A point and its image after a translation are given. Write a rule to describe the translation.

14.  $A(9, -4), A'(2, -1) \quad (x, y) \rightarrow$

15.  $B(-3, 5), B'(-5, -3) \quad (x, y) \rightarrow$

Write a rule to describe each statement.

16. In a  $90^\circ$  rotation, move point  $(x, y)$  to

17. In a  $180^\circ$  rotation, move point  $(x, y)$  to